

**IN THE CLAIMS:**

Please add new claims 47-56 as follows.

This listing of claims will replace all prior versions, and listings of the claims in the application.

**Listing of the claims**

**1-23.** (Canceled)

**24.** (Previously presented) A method of treating an individual who has metastasized colorectal cancer comprising the step of administering to such an individual a therapeutic ally effective amount of a vaccine comprising a nucleic acid molecule that encodes a protein comprising at least one epitope of human guanylyl cyclase C protein.

**25.** (Previously presented) A method of treating an individual who has been identified as being susceptible to metastasized colorectal cancer comprising the step of administering to such an individual a prophylactically effective amount of a vaccine comprising a nucleic acid molecule that encodes a protein comprising at least one epitope of human guanylyl cyclase C protein.

**26.** (Previously presented) The method of claim 24 wherein said protein comprises an epitope of the extracellular domain of the human guanylyl cyclase C protein.

**27.** (Previously presented) The method of claim 24 wherein said protein comprises the extracellular domain of the human guanylyl cyclase C protein.

28. (Previously presented) The method of claim 24 wherein the protein comprises the human guanylyl cyclase C protein.
29. (Previously presented) The method of claim 24 wherein the protein consists of the human guanylyl cyclase C protein.
30. (Previously presented) The method of claim 24 wherein the nucleic acid molecule that encodes said protein is within an infectious agent.
31. (Previously presented) The method of claim 24 wherein the nucleic acid molecule that encodes said protein is within a viral vector.
32. (Previously presented) The method of claim 31 wherein said viral vector is a recombinant vaccinia virus.
33. (Previously presented) The method of claim 31 wherein said viral vector is a recombinant adenovirus virus.
34. (Previously presented) The method of claim 24 wherein the nucleic acid molecule that encodes said protein is within a bacterial cell.
35. (Previously presented) The method of claim 24 wherein the nucleic acid molecule that encodes said protein is a plasmid.

36. (Previously presented) The method of claim 25 wherein said protein comprises an epitope of the extracellular domain of the human guanylyl cyclase C protein.
37. (Previously presented) The method of claim 25 wherein said protein comprises the extracellular domain of the human guanylyl cyclase C protein.
38. (Previously presented) The method of claim 25 wherein the protein comprises the human guanylyl cyclase C protein.
39. (Previously presented) The method of claim 25 wherein the protein consists of the human guanylyl cyclase C protein.
40. (Previously presented) The method of claim 25 wherein the nucleic acid molecule that encodes said protein is within an infectious agent.
41. (Previously presented) The method of claim 25 wherein the nucleic acid molecule that encodes said protein is within a viral vector.
42. (Previously presented) The method of claim 41 wherein said viral vector is a recombinant vaccinia virus.
43. (Previously presented) The method of claim 41 wherein said viral vector is a recombinant adenovirus virus.

**44.** (Previously presented) The method of claim 25 wherein the nucleic acid molecule that encodes said protein is within a bacterial cell.

**45.** (Previously presented) The method of claim 25 wherein the nucleic acid molecule that encodes said protein is a plasmid.

**46.** (Previously presented) The method of claim 25 wherein the individual has been previously been diagnosed with colorectal cancer.

**47.** (New) The method of claim 24 wherein said protein comprises SEQ ID NO:2 or a fragment thereof comprising at least one epitope of amino acids 24-454 of SEQ ID NO:2.

**48.** (New) The method of claim 47 wherein said protein comprises SEQ ID NO:2.

**49.** (New) The method of claim 47 wherein said protein at least one epitope of amino acids 24-454 of SEQ ID NO:2.

**50.** (New) The method of claim 49 wherein said protein comprises amino acids 24-454 of SEQ ID NO:2.

**51.** (New) The method of claim 49 wherein said protein comprises amino acids 24-475 of SEQ ID NO:2.

**52.** (New) The method of claim 25 wherein said protein comprises SEQ ID NO:2 or a fragment thereof comprising at least one epitope of amino acids 24-454 of SEQ ID NO:2.

- 53.** (New) The method of claim 52 wherein said protein comprises SEQ ID NO:2.
- 54.** (New) The method of claim 52 wherein said protein at least one epitope of amino acids 24-454 of SEQ ID NO:2.
- 55.** (New) The method of claim 54 wherein said protein comprises amino acids 24-454 of SEQ ID NO:2.
- 56.** (New) The method of claim 54 wherein said protein comprises amino acids 24-475 of SEQ ID NO:2.